# NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

#### Federal Funds

#### SCIENCE

For necessary expenses, not otherwise provided for, in the conduct and support of science research and development activities, including research, development, operations, support, and services; maintenance and repair, facility planning and design; space flight, spacecraft control, and communications activities; program management; personnel and related costs, including uniforms or allowances therefor, as authorized by sections 5901 and 5902 of title 5, United States Code; travel expenses; purchase and hire of passenger motor vehicles; and purchase, lease, charter, maintenance, and operation of mission and administrative aircraft, \$5,865,000,000, to remain available until September 30, 2020.

Note.—A full-year 2018 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Continuing Appropriations Act, 2018 (Division D of P.L. 115–56, as amended). The amounts included for 2018 reflect the annualized level provided by the continuing resolution.

# Program and Financing (in millions of dollars)

Identif	ication code 080-0120-0-1-252	2017 actual	2018 est.	2019 est.
0001	Obligations by program activity: Science	5,799	5,726	5,865
	Budgetary resources:			
1000	Unobligated balance:	201	200	201
1000 1021	Unobligated balance brought forward, Oct 1 Recoveries of prior year unpaid obligations	301 34	298 63	361 60
1021	Recoveries of prior year unpaid obligations			
1050	Unobligated balance (total)	335	361	421
1100	Appropriations, discretionary.	5,765	5,726	5,865
1120	Appropriations transferred to other accts CECR	0,700	0,720	0,000
1120	[080-0130]	-3		
1100	Access 2-Pers Providence (Intelligen			
1160	Appropriation, discretionary (total)	5,762 6,097	5,726 6,087	5,865
1930	Total budgetary resources available	0,097	0,067	6,286
1941	Unexpired unobligated balance, end of year	298	361	421
	Change in obligated balance:			
	Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	3,622	3,858	3,787
3010	New obligations, unexpired accounts	5,799	5,726	5,865
3011	Obligations ("upward adjustments"), expired accounts	7		
3020 3040	Outlays (gross)	-5,523 -34	-5,734 -63	-6,155 -60
3041	Recoveries of prior year unpaid obligations, unexpired Recoveries of prior year unpaid obligations, expired	-54 -13	-03	-00
3050	Unpaid obligations, end of year	3,858	3,787	3,437
3100	Obligated balance, start of year	3,622	3,858	3,787
3200	Obligated balance, end of year	3,858	3,787	3,437
	Budget authority and outlays, net:			
4000	Discretionary: Budget authority, gross Outlays, gross:	5,762	5,726	5,865
4010	Outlays from new discretionary authority	2,245	2,407	2,465
4011	Outlays from discretionary balances	3,278	3,327	3,690
4020	Outlays, gross (total)	5,523	5,734	6,155
4000	Offsets against gross budget authority and outlays: Offsetting collections (collected) from:	0		
4033	Non-Federal sources Additional offsets against gross budget authority only:	-2		
4052	Offsetting collections credited to expired accounts	2	<u></u>	<u></u>
4060	Additional offsets against budget authority only (total)	2		
4070	Budget authority, net (discretionary)	5,762	5,726	5,865
4080	Outlays, net (discretionary)	5,521	5,734	6,155
4180		5,762	5,726	5,865
4190	Outlays, net (total)	5,521	5,734	6,155

The Science appropriation provides for NASA's science mission, which is comprised of the agency's Earth and space science programs: Earth Science, Planetary Science, Heliophysics, and Astrophysics. These programs, which are managed by the Science Mission Directorate, seek to answer

fundamental questions concerning the global Earth system; other planets in the solar system and around other stars; the connections among the Sun, Earth, and heliosphere; and the origin and evolution of planetary systems, the galaxy, and the universe, including the origin and distribution of life in the universe. Program objectives are pursued through robotic flight missions, ground-based scientific research and data analysis, and the development of new technologies for future missions. Additionally, the Budget funds within Science a new lunar robotic exploration program that will support innovative approaches to achieving human and science exploration goals.

The Science appropriation provides for all of the research, development, operations, salaries and related expenses, and other general and administrative activities required to execute the programs within this account. Costs include labor, travel, procurement, and test and fabrication costs. Performance goals associated with these activities are addressed in NASA's detailed budget request.

#### Object Classification (in millions of dollars)

Identif	ication code 080-0120-0-1-252	2017 actual	2018 est.	2019 est.
	Direct obligations:			
	Personnel compensation:			
11.1	Full-time permanent	238	260	249
11.3	Other than full-time permanent	3	3	3
11.5	Other personnel compensation	1	1	1
11.9	Total personnel compensation	242	264	253
12.1	Civilian personnel benefits	76	76	79
21.0	Travel and transportation of persons	23	24	24
22.0	Transportation of things	4	5	5
23.2	Rental payments to others	9	8	8
23.3	Communications, utilities, and miscellaneous charges	4	4	4
24.0	Printing and reproduction	1	1	1
25.1	Advisory and assistance services	90	77	80
25.2	Other services from non-Federal sources	217	91	93
25.3	Other goods and services from Federal sources	218	239	246
25.4	Operation and maintenance of facilities	21	9	9
25.5	Research and development contracts	4,047	4,055	4,166
25.7	Operation and maintenance of equipment	104	102	105
26.0	Supplies and materials	31	26	27
31.0	Equipment	31	32	33
32.0	Land and structures	1	1	1
41.0	Grants, subsidies, and contributions	680	712	731
99.9	Total new obligations, unexpired accounts	5,799	5,726	5,865

# **Employment Summary**

Identif	fication code 080-0120-0-1-252	2017 actual	2018 est.	2019 est.
1001	Direct civilian full-time equivalent employment	1,888	1,875	1,876

#### AERONAUTICS

For necessary expenses, not otherwise provided for, in the conduct and support of aeronautics research and development activities, including research, development, operations, support, and services; maintenance and repair, facility planning and design; space flight, spacecraft control, and communications activities; program management; personnel and related costs, including uniforms or allowances therefor, as authorized by sections 5901 and 5902 of title 5, United States Code; travel expenses; purchase and hire of passenger motor vehicles; and purchase, lease, charter, maintenance, and operation of mission and administrative aircraft, \$608,900,000, to remain available until September 30, 2020.

Note.—A full-year 2018 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Continuing Appropriations Act, 2018 (Division D of P.L. 115–56, as amended). The amounts included for 2018 reflect the annualized level provided by the continuing resolution.

2018 est.

2019 est.

# AERONAUTICS—Continued Program and Financing (in millions of dollars)

- Identii	fication code 080-0126-0-1-402	2017 actual	2018 est.	2019 est.
0001	Obligations by program activity: Aeronautics	660	656	609
	Budgetary resources:			
1000	Unobligated balance: Unobligated balance brought forward, Oct 1	11	12	12
1021	Recoveries of prior year unpaid obligations	5		
1050	Unobligated balance (total)	16	12	12
2000	Budget authority: Appropriations, discretionary:	10		
1100	Appropriation	660	656	609
1120	Appropriations transferred to other acct CECR			
	[080–0130]			
1160	Appropriation, discretionary (total)	656	656	609
1930	Total budgetary resources available	672	668	621
1941	Memorandum (non-add) entries: Unexpired unobligated balance, end of year	12	12	12
3000 3010 3011	Change in obligated balance: Unpaid obligations: Unpaid obligations, brought forward, Oct 1	344 660	369 656	389 609
3011	Obligations ("unward adjustments") expired accounts	1		
3020	Obligations ("upward adjustments"), expired accounts Outlavs (gross)	1 -629		-609
	Obligations ("upward adjustments"), expired accounts Outlays (gross)			
3020 3040 3041	Outlays (gross)	-629	-636	-609
3040	Outlays (gross) Recoveries of prior year unpaid obligations, unexpired	-629 -5	-636 	<b>–609</b>
3040 3041 3050 3100	Outlays (gross)	-629 -5 -2 369	-636 389 389	-609 
3040 3041 3050 3100	Outlays (gross)	-629 -5 -2 -2 369	-636   389	-609 
3040 3041 3050 3100	Outlays (gross)  Recoveries of prior year unpaid obligations, unexpired  Recoveries of prior year unpaid obligations, expired  Unpaid obligations, end of year  Memorandum (non-add) entries: Obligated balance, start of year  Obligated balance, end of year  Budget authority and outlays, net:	-629 -5 -2 369	-636 389 389	389
3040 3041 3050 3100 3200	Outlays (gross)  Recoveries of prior year unpaid obligations, unexpired  Recoveries of prior year unpaid obligations, expired  Unpaid obligations, end of year  Memorandum (non-add) entries:  Obligated balance, start of year  Obligated balance, end of year  Budget authority and outlays, net:  Discretionary:	-629 -5 -2 369	-636 389 389	389 389 389
3040 3041 3050 3100 3200	Outlays (gross)  Recoveries of prior year unpaid obligations, unexpired  Recoveries of prior year unpaid obligations, expired  Unpaid obligations, end of year  Memorandum (non-add) entries: Obligated balance, start of year  Obligated balance, end of year  Budget authority and outlays, net:	-629 -5 -2 369 344 369		389 389 389
3040 3041 3050 3100 3200 4000 4010	Outlays (gross)  Recoveries of prior year unpaid obligations, unexpired  Recoveries of prior year unpaid obligations, expired  Unpaid obligations, end of year  Memorandum (non-add) entries: Obligated balance, start of year  Obligated balance, end of year  Budget authority and outlays, net: Discretionary: Budget authority, gross Outlays, gross: Outlays, from new discretionary authority	-629 -5 -2 369 344 369 656		-609 
3040 3041 3050 3100 3200 4000 4010	Outlays (gross)  Recoveries of prior year unpaid obligations, unexpired	-629 -5 -2 369 344 369		-609 388 388 388 609
3040 3041 3050 3100 3200 4000 4011	Outlays (gross)  Recoveries of prior year unpaid obligations, unexpired  Recoveries of prior year unpaid obligations, expired  Unpaid obligations, end of year  Memorandum (non-add) entries: Obligated balance, start of year  Obligated balance, end of year  Budget authority and outlays, net: Discretionary: Budget authority, gross Outlays, gross: Outlays, from new discretionary authority	-629 -5 -2 369 344 369 656		
3040 3041	Outlays (gross)  Recoveries of prior year unpaid obligations, unexpired	-629 -5 -2 369 344 369 656 340 289	-636 	

This appropriation provides for the full costs associated with NASA's Aeronautics Research mission, which aims to expand the boundaries of aeronautical knowledge for the benefit of the nation and the broad aeronautics community. The mission is managed by NASA's Aeronautics Research Mission Directorate, and consists of the following integrated research programs: Airspace Operations and Safety, Advanced Air Vehicles, Integrated Aviation Systems, and Transformative Aeronautics Concepts. Full costs of these programs cover all of the research; development; operations; salaries and related expenses; and other general and administrative activities required to execute the programs. Costs include labor, travel, procurement, test, and fabrication costs. Performance goals associated with these activities are addressed in NASA's detailed budget request.

# Object Classification (in millions of dollars)

Identi	fication code 080-0126-0-1-402	2017 actual	2018 est.	2019 est.
	Direct obligations:			
	Personnel compensation:			
11.1	Full-time permanent	159	117	109
11.3	Other than full-time permanent	3	2	2
11.9	Total personnel compensation	162	119	111
12.1	Civilian personnel benefits	50	37	34
21.0	Travel and transportation of persons	6	5	5
23.3	Communications, utilities, and miscellaneous charges	7	7	6
25.1	Advisory and assistance services	11	21	20
25.2	Other services from non-Federal sources	48	41	39
25.3	Other goods and services from Federal sources	5	5	5
25.4	Operation and maintenance of facilities	26	23	21
25.5	Research and development contracts	230	274	254
25.7	Operation and maintenance of equipment	37	34	31
26.0	Supplies and materials	23	22	20

31.0	Equipment	30	31	29
32.0		1	2	2
41.0		24	35	32
99.9	Total new obligations, unexpired accounts	660	656	609

# Employment Summary Identification code 080–0126–0–1–402 2017 actual 2018 est. 2019 est. 1001 Direct civilian full-time equivalent employment ...... 1,375 1,356 1,330

#### EXPLORATION RESEARCH AND TECHNOLOGY

For necessary expenses, not otherwise provided for, in the conduct and support of space technology research and development activities, including research, development, operations, support, and services; maintenance and repair, facility planning and design; space flight, spacecraft control, and communications activities; program management; personnel and related costs, including uniforms or allowances therefor, as authorized by sections 5901 and 5902 of title 5, United States Code; travel expenses; purchase and hire of passenger motor vehicles; and purchase, lease, charter, maintenance, and operation of mission and administrative aircraft, \$912,700,000, to remain available until September 30, 2020.

Note.—A full-year 2018 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Continuing Appropriations Act, 2018 (Division D of P.L. 115–56, as amended). The amounts included for 2018 reflect the annualized level provided by the continuing resolution.

#### Program and Financing (in millions of dollars)

Identification code 080-0131-0-1-252

0001	Obligations by program activity: Space Technology	719	682	913
	Budgetary resources:			
1000	Unobligated balance:	71	42	42
1000 1021	Unobligated balance brought forward, Oct 1	71 3	42	42
1050	Unobligated balance (total)	74	42	42
	Budget authority:			
	Appropriations, discretionary:			
1100	Appropriation	687	682	913
1930	Total budgetary resources available	761	724	955
1041	Memorandum (non-add) entries:	40	40	10
1941	Unexpired unobligated balance, end of year	42	42	42
	Change in obligated balance:			
	Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	485	500	518
3010	New obligations, unexpired accounts	719	682	913
3011	Obligations ("upward adjustments"), expired accounts	1		
3020	Outlays (gross)	-699	-664	-764
3040	Recoveries of prior year unpaid obligations, unexpired	-3		
3041	Recoveries of prior year unpaid obligations, expired			
3050	Unpaid obligations, end of year	500	518	667
	Memorandum (non-add) entries:			
3100	Obligated balance, start of year	485	500	518
3200	Obligated balance, end of year	500	518	667
	Budget authority and outlays, net:			
4000	Discretionary: Budget authority, gross	687	682	913
4000	Outlays, gross:	007	002	313
4010	Outlays from new discretionary authority	281	239	320
4011	Outlays from discretionary balances	418	425	444
	,			
4020	Outlays, gross (total)	699	664	764
	Offsets against gross budget authority and outlays:			
	Offsetting collections (collected) from:			
4033	Non-Federal sources	-1		
	Additional offsets against gross budget authority only:			
4052	Offsetting collections credited to expired accounts	1		
4070	Budget authority, net (discretionary)	687	682	913
4080	Outlays, net (discretionary)	698	664	764
4180	Budget authority, net (total)	687	682	913
4190	=	698	664	764

The FY 2019 President's Budget includes a new account structure for human space exploration and technology programs to improve alignment of funding with NASA's new strategic space exploration objectives. It renames the Space Operations, Exploration, and Space Technology accounts as LEO and Spaceflight Operations, Deep Space Exploration Systems, and Exploration Research and Technology, and realigns some program funding. As part of this realignment, NASA also plans to restructure the Human Exploration and Operations Mission Directorate and Space Technology Mission Directorate.

This appropriation provides for the costs associated with the research and technology development needed for space exploration. The full costs provide for all of the research, development, operations, salaries and related expenses, and other general and administrative activities required to execute the programs within this account. Costs include labor, travel, procurement, and those associated with fabrication, tests and flight demonstrations.

The programs within Exploration Research and Technology enable new missions by drawing on talent from the NASA workforce, academia, small businesses and the broader space enterprise to deliver innovative solutions that dramatically improve technological capabilities for NASA and the Nation, in addition to developing technologies and countermeasures to keep astronauts healthy and functional during deep space. The Exploration Research and Technology appropriation funds several programs: Small Business Innovative Research (SBIR), Small Business Technology Transfer (STTR), Early Stage Innovation & Partnerships, Technology Maturation, Technology Demonstrations, and Human Research Program (HRP). The Human Research Program and some technology efforts were previously included in the Exploration account, which is now Deep Space Exploration Systems. Performance goals associated with these activities are addressed in NASA's detailed budget request.

#### Object Classification (in millions of dollars)

Identif	ication code 080-0131-0-1-252	2017 actual	2018 est.	2019 est.
	Direct obligations:			
	Personnel compensation:			
11.1	Full-time permanent	86	82	94
11.3	Other than full-time permanent	1	1	1
11.9	Total personnel compensation	87	83	95
12.1	Civilian personnel benefits	27	27	31
21.0	Travel and transportation of persons	5	4	10
22.0	Transportation of things	3	2	2
25.1	Advisory and assistance services	27	25	31
25.2	Other services from non-Federal sources	37	41	44
25.3	Other goods and services from Federal sources	7	6	10
25.4	Operation and maintenance of facilities	3	4	5
25.5	Research and development contracts	436	411	560
25.7	Operation and maintenance of equipment	20	18	30
26.0	Supplies and materials	8	6	9
31.0	Equipment	16	15	16
41.0	Grants, subsidies, and contributions	43	40	70
99.9	Total new obligations, unexpired accounts	719	682	913

# **Employment Summary**

Identification code 080-0131-0-1-252	2017 actual	2018 est.	2019 est.
1001 Direct civilian full-time equivalent employment	733	680	922

# DEEP SPACE EXPLORATION SYSTEMS

For necessary expenses, not otherwise provided for, in the conduct and support of exploration research and development activities, including research, development, operations, support, and services; maintenance and repair, facility planning and design; space flight, spacecraft control, and communications activities; program management; personnel and related costs, including uniforms or allowances therefor, as authorized by sections 5901 and 5902 of title 5, United States Code; travel expenses; purchase and hire of passenger motor vehicles; and purchase, lease, charter, maintenance, and operation of mission and administrative aircraft, \$4,558,800,000, to remain available until September 30, 2020.

Note.—A full-year 2018 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Continuing Appropriations Act, 2018 (Division D of P.L. 115–56, as amended). The amounts included for 2018 reflect the annualized level provided by the continuing resolution.

# Program and Financing (in millions of dollars)

- Identin	ntification code 080-0124-0-1-252		2018 est.	2019 est.
0001	Obligations by program activity: Exploration	4,317	4,295	4,559
	Budgetary resources:			
1000	Unobligated balance:	42	01	187
1000	Unobligated balance brought forward, Oct 1	43 31	81 106	100
1021	Recoveries of prior year unpute obligations			
1050	Unobligated balance (total)	74	187	293
	Budget authority:			
	Appropriations, discretionary:			
1100	Appropriation	4,324	4,295	4,559
1930		4,398	4,482	4,852
1041	Memorandum (non-add) entries:	01	107	000
1941	Unexpired unobligated balance, end of year	81	187	293
	Change in obligated balance:			
	Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	1,270	1,402	1,329
3010	New obligations, unexpired accounts	4,317	4,295	4,559
3011	Obligations ("upward adjustments"), expired accounts	2		
3020	Outlays (gross)	-4,152	-4,262	-4,528
3040	Recoveries of prior year unpaid obligations, unexpired	-31	-106	-106
3041	Recoveries of prior year unpaid obligations, expired			
3050	Unpaid obligations, end of year	1,402	1,329	1,254
	Memorandum (non-add) entries:			
3100	Obligated balance, start of year	1,270	1,402	1,329
3200	Obligated balance, end of year	1,402	1,329	1,254
	Budget authority and outlays, net:			
	Discretionary:			
4000	Budget authority, gross	4,324	4,295	4,559
	Outlays, gross:	,-	,	,
4010	Outlays from new discretionary authority	2,886	2,878	3,055
4011	Outlays from discretionary balances	1,266	1,384	1,473
4020	Outlays, gross (total)	4.152	4.262	4,528
4180	Budget authority, net (total)	4.324	4,295	4,559
4190	Outlays, net (total)	4,152	4,262	4,528

The FY 2019 President's Budget includes a new account structure for human space exploration and technology program to improve alignment of funding with NASA's new strategic space exploration objectives. It renames the Space Operations, Exploration, and Space Technology accounts as LEO and Spaceflight Operations, Deep Space Exploration Systems, and Exploration Research and Technology, and realigns some program funding. As part of this realignment, NASA also plans to restructure the Human Exploration and Operations Mission Directorate and Space Technology Mission Directorate.

This appropriation provides for costs associated with the development of systems and capabilities required for human exploration of space. The capabilities include launch and crew vehicles for missions beyond low Earth orbit; providing integrated systems to keep astronauts safe, healthy, and functional during deep space missions; and advancing the tools to increase exploration capabilities and reduce the launch mass and cost of deep space missions. The full costs provide for the research, development, operations, salaries and related expenses, and other general and administrative activities required to execute the programs within this account. Costs include labor, travel, procurement, test, and fabrication costs. Performance goals associated with these activities are addressed in NASA's detailed budget request.

NASA's human space exploration programs include the Space Launch System, Orion, Exploration Ground Systems under the Exploration Systems Development theme, as well as cislunar and lunar surface programs. The Human Research Program and some technology programs that were previously included in the Exploration account are now reflected in the Exploration Research and Technology account.

# DEEP SPACE EXPLORATION SYSTEMS—Continued

Object	Classification	(in millions of dollars)
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Identific	cation code 080-0124-0-1-252	2017 actual	2018 est.	2019 est.
	Direct obligations:			
	Personnel compensation:			
11.1	Full-time permanent	320	337	327
11.3	Other than full-time permanent	2	2	2
11.5	Other personnel compensation	2	1	2
11.8	Special personal services payments		1	
11.9	Total personnel compensation	324	341	331
12.1	Civilian personnel benefits	105	109	107
21.0	Travel and transportation of persons	13	13	15
22.0	Transportation of things	1	1	1
23.3	Communications, utilities, and miscellaneous charges	17	14	15
25.1	Advisory and assistance services	466	442	473
25.2	Other services from non-Federal sources	52	45	49
25.3	Other goods and services from Federal sources	42	40	43
25.4	Operation and maintenance of facilities	108	103	110
25.5	Research and development contracts	2,850	2,858	3,063
25.7	Operation and maintenance of equipment	142	148	159
26.0	Supplies and materials	32	26	28
31.0	Equipment	46	44	47
32.0	Land and structures	62	52	55
41.0	Grants, subsidies, and contributions	57	59	63
99.9	Total new obligations, unexpired accounts	4,317	4,295	4,559

# **Employment Summary**

Identification code 080-0124-0-1-252	2017 actual	2018 est.	2019 est.
1001 Direct civilian full-time equivalent employment	2,701	2,651	2,549

#### EDUCATION

Unobligated balances previously appropriated under this heading shall be available for purposes of the closure of the Office of Education, including but not limited to, ongoing administration, oversight, monitoring, and funding of grants previously awarded by the Office of Education.

Note.—A full-year 2018 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Continuing Appropriations Act, 2018 (Division D of P.L. 115–56, as amended). The amounts included for 2018 reflect the annualized level provided by the continuing resolution.

# Program and Financing (in millions of dollars)

ldentif	ication code 080-0128-0-1-252	2017 actual	2018 est.	2019 est.
0001	Obligations by program activity: Education	105	99	
	Budgetary resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	11	8	12
1021	Recoveries of prior year unpaid obligations	2	4	4
1050	Unobligated balance (total)	13	12	16
	Budget authority:			
	Appropriations, discretionary:			
1100	Appropriation	100	99	
1930	Total budgetary resources available	113	111	16
	Memorandum (non-add) entries:			
1941	Unexpired unobligated balance, end of year	8	12	16
	Change in obligated balance:			
2000	Unpaid obligations:	100	157	
3000	Unpaid obligations, brought forward, Oct 1	180	157	51
3010	New obligations, unexpired accounts	105	99	
3020	Outlays (gross)	-124	-201	-47
3040	Recoveries of prior year unpaid obligations, unexpired	-2	-4	-4
3041	Recoveries of prior year unpaid obligations, expired			
3050	Unpaid obligations, end of year	157	51	
0000	Memorandum (non-add) entries:	107	01	
3100	Obligated balance, start of year	180	157	51
3200	Obligated balance, end of year	157	51	
	Budget authority and outlays, net: Discretionary:			
4000	Budget authority, gross	100	99	
+000	Duuget autilonty, gross	100	99	

4010 4011	Outlays, gross: Outlays from new discretionary authority Outlays from discretionary balances	12 112	99 102	47
4020	Outlays, gross (total)	124	201	47
	Budget authority, net (total)	100 124	99 201	47

The Budget proposes the termination of the Office of Education and its portfolio of programs and projects. Unobligated balances previously appropriated under this heading may be used to support close-out costs. Moving forward, a small team at NASA headquarters funded out of Agency Management and Operations will be accountable for strategic direction and coordination of the agency's STEM engagement efforts.

# Object Classification (in millions of dollars)

Identi	fication code 080-0128-0-1-252	2017 actual	2018 est.	2019 est.
	Direct obligations:			
	Personnel compensation:			
11.1	Full-time permanent	5	3	
11.8	Special personal services payments	1	1	
11.9	Total personnel compensation	6	4	
12.1	Civilian personnel benefits	1	2	
25.1	Advisory and assistance services	2	4	
25.2	Other services from non-Federal sources	4	6	
25.5	Research and development contracts	4	6	
25.7	Operation and maintenance of equipment	1	2	
41.0	Grants, subsidies, and contributions	87	75	
99.9	Total new obligations, unexpired accounts	105	99	

#### **Employment Summary**

Identification code 080-0128-0-1-252	2017 actual	2018 est.	2019 est.
1001 Direct civilian full-time equivalent employment	51	30	

# SAFETY, SECURITY AND MISSION SERVICES

For necessary expenses, not otherwise provided for, in the conduct and support of science, aeronautics, space technology, exploration, space operations and education research and development activities, including research, development, operations, support, and services; maintenance and repair, facility planning and design; space flight, spacecraft control, and communications activities; program management; personnel and related costs, including uniforms or allowances therefor, as authorized by sections 5901 and 5902 of title 5, United States Code; travel expenses; purchase and hire of passenger motor vehicles; not to exceed \$63,000 for official reception and representation expenses; and purchase, lease, charter, maintenance, and operation of mission and administrative aircraft, \$2,749,700,000, to remain available until September 30, 2020.

Note.—A full-year 2018 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Continuing Appropriations Act, 2018 (Division D of P.L. 115–56, as amended). The amounts included for 2018 reflect the annualized level provided by the continuing resolution.

# Program and Financing (in millions of dollars)

Identif	ication code 080-0122-0-1-252	2017 actual	2018 est.	2019 est.
	Obligations by program activity:			
0001	Cross Agency Support (Direct)	2,777	2,750	2,750
0801	Cross Agency Support (Reimbursable)	2,357	2,816	2,051
0900	Total new obligations, unexpired accounts	5,134	5,566	4,801
	Budgetary resources: Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	303	451	499
1021	Recoveries of prior year unpaid obligations	32	48	48
1050	Unobligated balance (total)	335	499	547
1100	Appropriations, discretionary: Appropriation	2.769	2.750	2.750
1100	Spending authority from offsetting collections, discretionary:	2,703	2,730	2,730
1700	Collected	2,238	2,816	2,051

1701	Change in uncollected payments, Federal sources	243		
1750	Spending auth from offsetting collections, disc (total)	2,481	2,816	2,051
1900	Budget authority (total)	5,250	5,566	4,801
1930	Total budgetary resources available	5,585	6,065	5,348
	Memorandum (non-add) entries:			
1941	Unexpired unobligated balance, end of year	451	499	547
	Change in obligated balance: Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	2,226	2,185	2,847
3010	New obligations, unexpired accounts	5,134	5,566	4,801
3011	Obligations ("upward adjustments"), expired accounts	9		
3020	Outlays (gross)	-5,145	-4,856	-5,905
3040	Recoveries of prior year unpaid obligations, unexpired	-32	-48	-48
3041	Recoveries of prior year unpaid obligations, expired	-7		
3050	Unpaid obligations, end of year	2,185	2,847	1,695
3060	Uncollected pyments:  Uncollected pyments, Fed sources, brought forward, Oct 1	-1,443	-1.613	-1,613
3070	Change in uncollected pymts, Fed sources, unexpired	-1,443 -243	-1,013	-1,013
3071	Change in uncollected pymts, Fed sources, expired	73		
3071	Ghange in unconected pyints, red sources, expired			
3090	Uncollected pymts, Fed sources, end of year Memorandum (non-add) entries:	-1,613	-1,613	-1,613
3100	Obligated balance, start of year	783	572	1,234
3200	Obligated balance, end of year	572	1,234	82
	Budget authority and outlays, net:			
	Discretionary:			
4000	Budget authority, gross	5,250	5,566	4,801
	Outlays, gross:			
4010	Outlays from new discretionary authority	2,990	3,157	2,897
4011	Outlays from discretionary balances	2,155	1,699	3,008
4000	0	E 145	4.050	E 00E
4020	Outlays, gross (total)	5,145	4,856	5,905
4020	Offsets against gross budget authority and outlays: Offsetting collections (collected) from:	0.001	0.540	1.040
4030	Federal sources	-2,091	-2,548	-1,846
4033	Non-Federal sources	-220	-268	-205
4040	Offsets against gross budget authority and outlays (total) Additional offsets against gross budget authority only:	-2,311	-2,816	-2,051
4050	Change in uncollected pymts, Fed sources, unexpired	-243		
4052	Offsetting collections credited to expired accounts	73		
4060	Additional offsets against budget authority only (total)	-170		
4070	Budget authority, net (discretionary)	2,769	2.750	2,750
4080	Outlays, net (discretionary)	2,703	2,730	3,854
4180	Budget authority, net (total)	2,769	2,750	2,750
4190	Outlays, net (total)	2,834	2,040	3,854
4100	04.040, 100 (0.041)	2,004	2,070	0,004

Safety, Security, and Mission Services (SSMS) manages agency-wide mission support functions and some of NASA's unique research facilities.

This appropriation provides for the operations and maintenance, salaries and related expenses, and other general and administrative activities that support all NASA's missions.

Under SSMS, Center Management and Operations includes the basic costs to manage and operate each of the nine NASA field centers and to maintain the technical capabilities required to support the Agency's Mission. The SSMS budget is not directly allocated or aligned to specific program or project requirements, but is centralized for efficient and effective administration and operation of the NASA Centers.

Under SSMS, Agency Management and Operations provides for the management and oversight of corporate programs, the performance of agency-wide activities and functions, and the maintenance of unique research capabilities and facilities. Responsibilities include budget formulation and execution; establishment of management policies, procedures, and performance criteria; evaluation of progress; and coordination and integration of the Agency's activities.

# Object Classification (in millions of dollars)

Identifica	ation code 080-0122-0-1-252	2017 actual	2018 est.	2019 est.
	Direct obligations:			
	Personnel compensation:			
11.1	Full-time permanent	883	994	869
11.3	Other than full-time permanent	17	20	17
11.5	Other personnel compensation	30	29	29
11.8	Special personal services payments		1	

11 9	Total personnel compensation	930	1.044	915
12.1	Civilian personnel benefits	281	314	278
13.0	Benefits for former personnel	1	1	1
21.0	Travel and transportation of persons	22	19	22
22.0	Transportation of things	2	2	2
23.1	Rental payments to GSA	7	6	7
23.1	Rental payments to others	22	20	22
23.2		59	53	
23.3 24.0	Communications, utilities, and miscellaneous charges	3	3	59 3
	Printing and reproduction	•	•	-
25.1	Advisory and assistance services	249	222	247
25.2	Other services from non-Federal sources	264	234	261
25.3	Other goods and services from Federal sources	49	43	48
25.4	Operation and maintenance of facilities	220	195	217
25.5	Research and development contracts	176	157	175
25.6	Medical care	8	7	8
25.7	Operation and maintenance of equipment	403	357	405
26.0	Supplies and materials	16	15	16
31.0	Equipment	33	29	32
32.0	Land and structures	16	15	16
41.0	Grants, subsidies, and contributions	16	14	16
99.0	Direct obligations	2,777	2,750	2,750
99.0	Reimbursable obligations	2,357	2,816	2,051
99.9	Total new obligations, unexpired accounts	5,134	5,566	4,801

# **Employment Summary**

Identification code 080-0122-0-1-252	2017 actual	2018 est.	2019 est.
1001 Direct civilian full-time equivalent employment	7,337	7,690	7,655
	326	263	307

# CONSTRUCTION AND ENVIRONMENTAL COMPLIANCE AND RESTORATION

For necessary expenses for construction of facilities including repair, rehabilitation, revitalization, and modification of facilities, construction of new facilities and additions to existing facilities, facility planning and design, and restoration, and acquisition or condemnation of real property, as authorized by law, and environmental compliance and restoration, \$348,200,000, to remain available until September 30, 2024: Provided, That proceeds from leases deposited into this account shall be available for a period of 5 years to the extent and in amounts as provided in annual appropriations Acts: Provided further, That such proceeds referred to in the preceding proviso shall be available for obligation for fiscal year 2019 in an amount not to exceed \$9,470,300: Provided further, That each annual budget request shall include an annual estimate of gross receipts and collections and proposed use of all funds collected pursuant to section 20145 of title 51, United States Code.

Note.—A full-year 2018 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Continuing Appropriations Act, 2018 (Division D of P.L. 115–56, as amended). The amounts included for 2018 reflect the annualized level provided by the continuing resolution.

#### Program and Financing (in millions of dollars)

Identif	fication code 080-0130-0-1-252	2017 actual	2018 est.	2019 est.
	Obligations by program activity:			
0001	Construction and Environmental Compliance and Restoration	439	408	398
0801	(Direct)	439	408	398
0001	(Reimbursable)	4	9	9
0900	Total new obligations, unexpired accounts	443	417	407
	Budgetary resources: Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	134	269	281
1021	Recoveries of prior year unpaid obligations	14	62	62
1050	Unobligated balance (total)	148	331	343
	Appropriations, discretionary:			
1100	Appropriation	544	358	348
1121	Appropriations transferred from other acct Space Operations [080-0115]	8		
1121	Appropriations transferred from other acct Aeronautics [080–0126]	4		
1121	Appropriations transferred from other acct Science [080-0120]	3		
1160	Appropriation, discretionary (total)	559	358	348
1700	Collected	5	9	9

# CONSTRUCTION AND ENVIRONMENTAL COMPLIANCE AND RESTORATION—Continued Program and Financing—Continued

Identif	ication code 080-0130-0-1-252	2017 actual	2018 est.	2019 est.
1900	Budget authority (total)	564	367	357
1930	Total budgetary resources available	712	698	700
1941	Unexpired unobligated balance, end of year	269	281	293
	Change in obligated balance: Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	719	658	652
3010	New obligations, unexpired accounts	443	417	407
3020	Outlays (gross)	-490	-361	-483
3040	Recoveries of prior year unpaid obligations, unexpired	-14	-62	-62
3050	Unpaid obligations, end of year  Memorandum (non-add) entries:	658	652	514
3100	Obligated balance, start of year	719	658	652
3200	Obligated balance, end of year	658	652	514
	Budget authority and outlays, net: Discretionary:			
4000	Budget authority, gross	564	367	357
4010	Outlays from new discretionary authority	45	22	22
4011	Outlays from discretionary balances	445	339	461
4020	Outlays, gross (total)	490	361	483
4033	Non-Federal sources	-5	_9	_9
4180	Budget authority, net (total)	559	358	348
4190	Outlays, net (total)	485	352	474

This appropriation provides for NASA's construction and environmental compliance and restoration activities, and makes available to use the net proceeds from Enhanced Use Leases for maintenance, capital revitalization, and improvement of real property assets and related personal property at NASA Centers received under the authority of section 20145 of the National Aeronautics and Space Act (51 U.S.C. 20145). The funding provides for all of the research; development; operations; design, repair, rehabilitation, modification of facilities, and construction of new facilities; and other general and administrative activities required to execute the programs within this account.

# Object Classification (in millions of dollars)

ldentifi	ication code 080-0130-0-1-252	2017 actual	2018 est.	2019 est.
	Direct obligations:			
23.3	Communications, utilities, and miscellaneous charges	1	1	1
25.1	Advisory and assistance services	33	31	30
25.2	Other services from non-Federal sources	17	16	16
25.3	Other goods and services from Federal sources	20	18	18
25.4	Operation and maintenance of facilities	93	86	84
25.5	Research and development contracts	8	8	8
25.7	Operation and maintenance of equipment	22	20	20
31.0	Equipment	2	1	1
32.0	Land and structures	243	227	220
99.0	Direct obligations	439	408	398
99.0	Reimbursable obligations	4	9	9
99.9	Total new obligations, unexpired accounts	443	417	407

# LEO AND SPACEFLIGHT OPERATIONS

For necessary expenses, not otherwise provided for, in the conduct and support of space operations research and development activities, including research, development, operations, support and services; space flight, spacecraft control and communications activities, including operations, production, and services; maintenance and repair, facility planning and design; program management; personnel and related costs, including uniforms or allowances therefor, as authorized by sections 5901 and 5902 of title 5, United States Code; travel expenses; purchase and hire of passenger motor vehicles; and purchase, lease, charter, maintenance and operation of mission and administrative aircraft, \$4,509,600,000, to remain available until September 30, 2020.

Note.—A full-year 2018 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Continuing Appropriations Act, 2018 (Division D of P.L. 115–56, as amended). The amounts included for 2018 reflect the annualized level provided by the continuing resolution.

# Program and Financing (in millions of dollars)

Identif	fication code 080-0115-0-1-252	2017 actual	2018 est.	2019 est.
0001	Obligations by program activity: Space Operations	4,996	4,917	4,510
	Budgetary resources:			_
1000	Unobligated balance: Unobligated balance brought forward, Oct 1	104	91	449
1000	Recoveries of prior year unpaid obligations	39	358	108
1033	Recoveries of prior year paid obligations	1		
1050	Unobligated balance (total)	144	449	557
1000	Budget authority:	111	440	007
	Appropriations, discretionary:			
1100	Appropriation	4,951	4,917	4,510
1120	Appropriations transferred to other accts CECR [080–0130]	-8		
1160	Appropriation, discretionary (total)	4,943	4,917	4,510
1900	Budget authority (total)	4,943	4,917	4,510
1930	Total budgetary resources available	5,087	5,366	5,067
1000	Memorandum (non-add) entries:	0,007	0,000	0,007
1941	Unexpired unobligated balance, end of year	91	449	557
	Change in obligated balance:			
	Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	1,717	2,431	1,567
3010	New obligations, unexpired accounts	4,996	4,917	4,510
3011	Obligations ("upward adjustments"), expired accounts	7		
3020	Outlays (gross)	-4,242	-5,423	-4,716
3040	Recoveries of prior year unpaid obligations, unexpired	-39	-358	-108
3041	Recoveries of prior year unpaid obligations, expired	8		
3050	Unpaid obligations, end of year	2,431	1,567	1,253
3100	Obligated balance, start of year	1,717	2,431	1,567
3200	Obligated balance, end of year	2,431	1,567	1,253
	Budget authority and outlays, net:			
4000	Discretionary: Budget authority, gross	4,943	4,917	4,510
4000	Outlays, gross:	4,343	4,317	4,310
4010	Outlays from new discretionary authority	2,589	3,147	2,887
4011	Outlays from discretionary balances	1,652	2,276	1,829
4000				
4020	Outlays, gross (total)	4,241	5,423	4,716
	Offsets against gross budget authority and outlays:			
4033	Offsetting collections (collected) from: Non-Federal sources	-5		
4033	Non-reactal sources		<del></del>	
4040	Offsets against gross budget authority and outlays (total) Additional offsets against gross budget authority only:	-5		
4052 4053	Offsetting collections credited to expired accounts Recoveries of prior year paid obligations, unexpired	4		
	accounts	1		
4060	Additional offsets against budget authority only (total)	5		
4070	Budget authority, net (discretionary)	4,943	4,917	4,510
4070	Outlays, net (discretionary)	4,236		4,310
4000	Mandatory:	4,230	5,423	4,/10
	Outlays, gross:			
4101	Outlays from mandatory balances	1		
4180	Budget authority, net (total)	4,943	4,917	4,510
4190	Outlays, net (total)	4,237	5,423	4,716

The FY 2019 President's Budget includes a new account structure for human space exploration and technology programs to improve alignment of funding with NASA's new strategic space exploration objectives. It renames the Space Operations, Exploration, and Space Technology accounts as LEO and Spaceflight Operations, Deep Space Exploration Systems, and Exploration Research and Technology, and realigns some program funding. As part of this realignment, NASA also plans to restructure the Human Exploration and Operations Mission Directorate and Space Technology Mission Directorate.

This appropriation provides for the full costs associated with Low Earth Orbit (LEO) and spaceflight operations activities of the agency. The full

costs include all labor, travel, procurement, test, and fabrication costs to execute these programs, which provide for all of the research, development, operations, salaries and related expenses, and other general and administrative activities supporting the programs within this account. Major themes within the LEO and Spaceflight Operations account include the International Space Station, Space Transportation, Space and Flight Support, and Commercial LEO Development. Performance goals associated with these activities are addressed in NASA's detailed budget request.

The International Space Station (ISS) is a complex of research laboratories in LEO where America and its international partners, including Russia, Canada, Europe, and Japan, conduct unique scientific and technological investigations in a microgravity environment. The objective of the International Space Station is to support human space exploration and conduct science experiments and technology development unique to the on-orbit attributes of the facility.

Space Transportation's objective is to transport U.S. astronauts and cargo safely back and forth to the ISS and potentially, in the future, to other orbital platforms and destinations. This theme includes the Commercial Crew Program and Crew and Cargo Program. Maintaining the ISS requires a fleet of vehicles and launch locations to transport astronauts, science experiments, critical supplies, maintenance hardware, and propellant to the ISS, and to dispose of waste generated on the ISS. The Commercial Crew Program partners with two U.S. companies, SpaceX and Boeing, to develop and operate safe, reliable, and affordable crew transportation to LEO. The Crew and Cargo Program purchases cargo transportation to the ISS under commercial resupply services contracts with Orbital ATK, SpaceX, and Sierra Nevada and purchases crew transportation from the Russian Roscosmos State Corporation, Boeing, and SpaceX. Payments to develop and test commercial crew vehicles, and for initial Post Certification Missions (PCMs) for each provider are funded by the Commercial Crew Program, whereas subsequent payments for operational commercial crew missions are funded by the Crew and Cargo Program.

Space and Flight Support is comprised of multiple programs that provide ongoing support for a wide range of services required for safe and successful space mission operations. These programs include Space Communications and Navigation, Human Space Flight Operations, Launch Services, and Rocket Propulsion Testing. Services are provided to a wide range of customers including NASA, other U.S. Federal agencies, foreign governments, and commercial customers.

Commercial LEO Development will support efforts to expand commercial activities in LEO, with a focus on enabling, developing, and deploying commercial platforms that can be used by NASA and other customers.

Object Classification (in millions of dollars)

Identifi	cation code 080-0115-0-1-252	2017 actual	2018 est.	2019 est.
	Direct obligations:			
	Personnel compensation:			
11.1	Full-time permanent	293	309	296
11.3	Other than full-time permanent	3	2	3
11.5	Other personnel compensation	2	2	2
11.9	Total personnel compensation	298	313	301
12.1	Civilian personnel benefits	95	98	96
21.0	Travel and transportation of persons	15	13	12
22.0	Transportation of things	1,594	1,493	1,362
23.2	Rental payments to others	2	3	3
23.3	Communications, utilities, and miscellaneous charges	4	4	4
24.0	Printing and reproduction	1	1	
25.1	Advisory and assistance services	95	84	77
25.2	Other services from non-Federal sources	149	127	116
25.3	Other goods and services from Federal sources	29	25	23
25.4	Operation and maintenance of facilities	49	37	34
25.5	Research and development contracts	2,362	2,414	2,204
25.7	Operation and maintenance of equipment	225	233	212
26.0	Supplies and materials	18	19	17
31.0	Equipment	13	16	15
32.0	Land and structures	7	5	4
41.0	Grants, subsidies, and contributions	40	32	30
99.9	Total new obligations, unexpired accounts	4,996	4,917	4,510

# **Employment Summary**

Identification code 080-0115-0-1-252	2017 actual	2018 est.	2019 est.
1001 Direct civilian full-time equivalent employment	2,407	2,404	2,252

#### OFFICE OF INSPECTOR GENERAL

For necessary expenses of the Office of Inspector General in carrying out the Inspector General Act of 1978, \$39,300,000, to remain available until September 30, 2020.

Note.—A full-year 2018 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Continuing Appropriations Act, 2018 (Division D of P.L. 115–56, as amended). The amounts included for 2018 reflect the annualized level provided by the continuing resolution.

#### Program and Financing (in millions of dollars)

Identif	ication code 080-0109-0-1-252	2017 actual	2018 est.	2019 est.
0001	Obligations by program activity:	00	00	0.0
0001 0801	Office of Inspector General (Direct)	38 1	38 2	39
0001	Office of hispector deficial (Neilibursable)			
0900	Total new obligations, unexpired accounts	39	40	41
	Budgetary resources: Budget authority:			
	Appropriations, discretionary:			
1100	Appropriation	38	38	39
	Spending authority from offsetting collections, discretionary:			
1700	Collected	1	2	2
1900	Budget authority (total)	39	40	41
1930	Total budgetary resources available	39	40	41
	Change in obligated balance:			
	Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	4	4	4
3010	New obligations, unexpired accounts	39	40	41
3011	Obligations ("upward adjustments"), expired accounts	1		
3020	Outlays (gross)	-39	-40	-41
3041	Recoveries of prior year unpaid obligations, expired			
3050	Unpaid obligations, end of year	4	4	4
	Memorandum (non-add) entries:			
3100	Obligated balance, start of year	4	4	4
3200	Obligated balance, end of year	4	4	4
	Budget authority and outlays, net:			
	Discretionary:			
4000	Budget authority, gross	39	40	41
	Outlays, gross:			
4010	Outlays from new discretionary authority	35	36	37
4011	Outlays from discretionary balances	4	4	4
4020	Outlays, gross (total)	39	40	41
	Offsets against gross budget authority and outlays:			
	Offsetting collections (collected) from:			
4030	Federal sources	-1	-2	-2
4180	Budget authority, net (total)	38	38	39
4190	Outlays, net (total)	38	38	39

This appropriation provides for the full costs associated with the operations of the NASA Office of Inspector General. The mission of the Office of Inspector General is to conduct audits and investigations of agency activities to prevent and detect fraud, waste, abuse, and mismanagement. The Inspector General keeps the NASA Administrator and the Congress informed of problems and deficiencies in agency programs and operations.

#### Object Classification (in millions of dollars)

Identific	cation code 080-0109-0-1-252	2017 actual	2018 est.	2019 est.
	Direct obligations:			
11.1	Personnel compensation: Full-time permanent	23	23	24
12.1	Civilian personnel benefits	9	9	9
21.0	Travel and transportation of persons	1	1	1
25.2	Other services from non-Federal sources	3	3	3
25.3	Other goods and services from Federal sources	1	1	1
25.7	Operation and maintenance of equipment	1	1	1

# OFFICE OF INSPECTOR GENERAL—Continued Object Classification—Continued

Identificat	ion code 080-0109-0-1-252	2017 actual	2018 est.	2019 est.
99.0 99.0	Direct obligations	38 1	38	39 2
99.9	Total new obligations, unexpired accounts	39	40	41

# **Employment Summary**

Identification code 080-0109-0-1-252	2017 actual	2018 est.	2019 est.
1001 Direct civilian full-time equivalent employment	186	186	186
	6	6	6

#### SCIENCE, AERONAUTICS, AND EXPLORATION

# Program and Financing (in millions of dollars)

	2017 actual	2018 est.	2019 est.
Budgetary resources:			
	1	1	1
			-1
Total budgetary resources available	1	1	
		1	
Unexpired unobligated balance, end of year	1	1	
	1	1	
Harrist at Paristra and of the			
	1		
	1	1	
Obligated balance, end of year	1	-	
Budget authority and outlays, net:			
Discretionary:			
			-1
		1	
		-	
9 7		1	-1
	Unobligated balance: Unobligated balance brought forward, Oct 1	Unobligated balance: Unobligated balance brought forward, Oct 1	Unobligated balance: Unobligated balance brought forward, Oct 1

The Science, Aeronautics, and Exploration account shows spending from balances prior to the account restructuring. In FY 2019, obligated balances will be transferred and merged into Treasury account 80–0130. Unobligated balances will be returned to Treasury and thereafter, this account will be closed.

# HUMAN SPACE FLIGHT

# Program and Financing (in millions of dollars)

Identif	ication code 080–0111–0–1–252	2017 actual	2018 est.	2019 est.
	Change in obligated balance: Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	6	1	1
3020	Outlays (gross)	-1		
3041	Recoveries of prior year unpaid obligations, expired			
3050	Unpaid obligations, end of year  Memorandum (non-add) entries:	1	1	1
3100	Obligated balance, start of year	6	1	1
3200	Obligated balance, end of year	1	1	1

Outlays from discretionary balances .....

4011

4180	Budget authority, net (total)		 
4190	Outlays, net (total)	1	 

The Human Space Flight account shows spending from balances prior to the account restructuring. In FY 2019, obligated balances will be transferred and merged into Treasury accounts 80–0122, 80–0115 and 80–0130. Unobligated balances will be returned to Treasury and thereafter, this account will be closed.

#### SCIENCE, AERONAUTICS AND TECHNOLOGY

#### Program and Financing (in millions of dollars)

Identif	ication code 080-0110-0-1-999	2017 actual	2018 est.	2019 est.
	Budgetary resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	1	1	1
	Budget authority:			
	Appropriations, discretionary:			
1131	Unobligated balance of appropriations permanently			
	reduced			-1
1930	Total budgetary resources available	1	1	
	Memorandum (non-add) entries:			
1941	Unexpired unobligated balance, end of year	1	1	
	Change in obligated balance: Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	1	1	1
3050	Unpaid obligations, end of year Memorandum (non-add) entries:	1	1	1
3100	Obligated balance, start of year	1	1	1
3200	Obligated balance, end of year	1	1	1
	Budget authority and outlays, net: Discretionary:			
4000	Budget authority, gross			-1
4180	Budget authority, net (total)			-1
4190	Outlays, net (total)			

The Science, Aeronautics, and Technology account shows spending from balances prior to the account restructuring. In FY 2019, obligated balances will be transferred and merged into Treasury account 80–0130. Unobligated balances will be returned to Treasury and thereafter, this account will be closed.

# MISSION SUPPORT

# Program and Financing (in millions of dollars)

Identification code 080-0112-0-1-999		2017 actual	2018 est.	2019 est.
	Budgetary resources: Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	1	1	2
1033	Recoveries of prior year paid obligations		1	
1050	Unobligated balance (total)	1	2	2
1131	Appropriations, discretionary:			
1131	Unobligated balance of appropriations permanently reduced			_2
1930	Total budgetary resources available	1	2	
	Memorandum (non-add) entries:			
1941	Unexpired unobligated balance, end of year	1	2	
	Budget authority and outlays, net: Discretionary:			
4000	Budget authority, gross			-2
	Offsets against gross budget authority and outlays: Offsetting collections (collected) from:			
4033	Non-Federal sources		_1	
	Additional offsets against gross budget authority only:		•	
4053	Recoveries of prior year paid obligations, unexpired			
	accounts		1	
4070	D. double the St. and Alberta Committee			
4070 4080	Budget authority, net (discretionary) Outlays, net (discretionary)		_1	-2
4000	outlays, het (discietionaly)		-1	

 4180 Budget authority, net (total)
 —

 4190 Outlays, net (total)
 —1

The Mission Support account shows spending from residual balances associated with construction of facilities activities prior to 2004.

In FY 2019, obligated balances will be transferred and merged into Treasury accounts 80–0122 and 80–0130. Unobligated balances will be returned to Treasury and thereafter, this account will be closed.

# WORKING CAPITAL FUND

#### Program and Financing (in millions of dollars)

Identification code 080–4546–0–4–252		2017 actual	2018 est.	2019 est.
0801	Obligations by program activity: Working Capital Fund (Reimbursable)	436	504	521
	Budgetary resources: Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	13	15	17
1021	Recoveries of prior year unpaid obligations	1	3	
1050	Unobligated balance (total)	14	18	17
	Budget authority:			
	Spending authority from offsetting collections, discretionary:			
1700	Collected	437	503	523
1930	Total budgetary resources available	451	521	540
	Memorandum (non-add) entries:			
1941	Unexpired unobligated balance, end of year	15	17	19
	Change in obligated balance:			
	Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	168	182	191
3010	New obligations, unexpired accounts	436	504	521
3020	Outlays (gross)	-421	-492	-517
3040	Recoveries of prior year unpaid obligations, unexpired	-1		
3050	Unpaid obligations, end of year	182	191	195
	Memorandum (non-add) entries:			
3100	Obligated balance, start of year	168	182	191
3200	Obligated balance, end of year	182	191	195
	Budget authority and outlays, net:			
4000	Discretionary:	407	500	500
4000	Budget authority, gross Outlays, gross:	437	503	523
4010	Outlays from new discretionary authority	240	302	314
4011	Outlays from discretionary balances	181	190	203
4020	Outlays, gross (total)	421	492	517
	Offsets against gross budget authority and outlays:			
4030	Offsetting collections (collected) from: Federal sources	-422	-478	-493
4030		-422 -15	-478 -25	-493 -30
4033	Non-Federal sources	-15	-25	-30
4040	Offsets against gross budget authority and outlays (total)	-437	-503	-523
4080	Outlays, net (discretionary)	-16	-11	-6
4180	Budget authority, net (total)			
4190	Outlays, net (total)	-16	-11	-6

The Working Capital Fund provides goods and services on a reimbursable basis. The Fund finances four program activities. The first is the Solutions for Enterprise-wide Procurement program, which finances, on an agencywide basis, scientific and engineering workstation procurement. The second program is the Information Technology Infrastructure Integration Program which consolidates and centralizes management of NASA information technology services in the areas of Tier 1 service desk and ordering, web services and technologies, enterprise business and management applications, integrated network/communications services, end user services, and data center services. The third program, NASA's Shared Services Center, performs selected financial management, human resources, information technology, and procurement services for NASA Headquarters and Centers. The last program, the National Center for Critical Information Processing and Storage, provides federal customers collocation services at a Tier III level with complete redundancy in the electrical distribution system from the national grid to the rack level.

# Object Classification (in millions of dollars)

Identif	Identification code 080-4546-0-4-252		2018 est.	2019 est.		
	Reimbursable obligations:					
11.1	Personnel compensation: Full-time permanent	15	16	16		
12.1	Civilian personnel benefits	5	6	6		
21.0	Travel and transportation of persons	1	1	1		
23.2	Rental payments to others	1	1	1		
23.3	Communications, utilities, and miscellaneous charges	4	4	4		
25.2	Other services from non-Federal sources	46	55	60		
25.3	Other goods and services from Federal sources	1	3	5		
25.4	Operation and maintenance of facilities	19	25	25		
25.7	Operation and maintenance of equipment	343	391	401		
26.0	Supplies and materials	1	2	2		
99.9	Total new obligations, unexpired accounts	436	504	521		

# **Employment Summary**

Identification code 080-4546-0-4-252	2017 actual	2018 est.	2019 est.
2001 Reimbursable civilian full-time equivalent employment	158	158	158

#### Trust Funds

SCIENCE, SPACE, AND TECHNOLOGY EDUCATION TRUST FUND

# Special and Trust Fund Receipts (in millions of dollars)

Identification code 080-8978-0-7-503		2017 actual	2018 est.	2019 est.
0100 0198	Balance, start of year	15 1	16	16
0199	Balance, start of year	16	16	16
1140	Earnings on Investments, Science, Space and Technology Education Trust Fund	2	1	1
2000	Total: Balances and receipts	18	17	17
2101 5098	Science, Space, and Technology Education Trust Fund	−1 −1	-1	-1
5099	Balance, end of year	16	16	16

# Program and Financing (in millions of dollars)

Identif	fication code 080-8978-0-7-503	2017 actual	2018 est.	2019 est.
	Obligations by program activity:			
0001	Science, Space, and Technology Education Trust Fund	1	1	1
0900	Total new obligations (object class 41.0)	1	1	1
	Budgetary resources: Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	1	1	1
	Appropriations, mandatory:			
1201	Appropriation (special or trust fund)	1	1	1
1930	Total budgetary resources available	2	2	2
1941	Unexpired unobligated balance, end of year	1	1	1
	Change in obligated balance: Unpaid obligations:			
3010	New obligations, unexpired accounts	1	1	1
3020	Outlays (gross)	-1	-1	-1
	Budget authority and outlays, net: Mandatory:			
4090	Budget authority, gross	1	1	1
	Outlays, gross:			
4100	Outlays from new mandatory authority		1	1
4101	Outlays from mandatory balances	1		

4110 Outlays, gross (total) ... 4180 Budget authority, net (total)

4190 Outlays, net (total) .

# SCIENCE, SPACE, AND TECHNOLOGY EDUCATION TRUST FUND—Continued Program and Financing—Continued

Identification code 080-8978-0-7-503	2017 actual	2018 est.	2019 est.
Memorandum (non-add) entries: 5000 Total investments, SOY: Federal securities: Par value	16	17	17
	17	17	17

#### Administrative Provisions

(INCLUDING TRANSFERS OF FUNDS)

Funds for any announced prize otherwise authorized shall remain available, without fiscal year limitation, until the prize is claimed or the offer is withdrawn.

Not to exceed 5 percent of any appropriation made available for the current fiscal year for the National Aeronautics and Space Administration in this Act, or provided for the National Aeronautics and Space Administration under previous appropriations Acts that remain available for obligation or expenditure in fiscal year 2019, may be transferred between such appropriations, but no such appropriation, except as otherwise specifically provided, shall be increased by more than 10 percent by any such transfers. Any such funds transferred to "Construction and Environmental Compliance and Restoration" for construction activities shall not increase that appropriation by more than 20 percent. Balances so transferred shall be merged with

and available for the same purposes and the same time period as the appropriations to which transferred. Any transfer pursuant to this provision shall be treated as a reprogramming of funds under section 504 of this Act and shall not be available for obligation except in compliance with the procedures set forth in that section.

The spending plan required by this Act shall be provided by NASA at the theme and program level. The spending plan, as well as any subsequent change of an amount established in that spending plan that meets the notification requirements of section 504 of this Act, shall be treated as a reprogramming under section 504 of this Act and shall not be available for obligation or expenditure except in compliance with the procedures set forth in that section.

# GENERAL FUND RECEIPT ACCOUNTS

(in millions of dollars)

	2017 actual	2018 est.	2019 est.
Offsetting receipts from the public: 080-322000 All Other General Fund Proprietary Receipts Including Budget Clearing Accounts	2	4	4
General Fund Offsetting receipts from the public		4	4
080–388500 Undistributed Intragovernmental Payments and Receivables from Cancelled Accounts	3	2	2
General Fund Intragovernmental payments	3	2	2